

Exhibit 29

CCT R. Gaff
D. HowardLudlow 27th October 92
Réf. JPG 92.1236Copie : AJ TALMON - T. KWASIZUR
D. BAKER - J. BUETTNER
WR SEVY - B. DUCASSEVisit of JP GRANGE to Vermont operations.

1.- The ore quality.

Talked with Mike Keener (quality manager) and Lance Meade and later with Roger Miller. ~~Pete Coalter, Vice President, Russ Collier, Henry Hayes, Carken~~

~~SICP Mine~~
The mining method is the major problem in Vermont. The orebodies contain a variety of ores with very different qualities. The ore changes completely on very short distances. A highly selective mining method must be enforced in order to supply the right ore grade to each end product.

The cost of mining seems to have been the single criterion for mining decisions at the expenses of the quality aspects. The consequences has been very detrimental to the costs of processing. ?

Strong emphasis must be put on ore quality at every level of management, starting from the top.

Five mines in operation : Hamm, the Ludlow mines (Argonaut, Black Bear, Rainbow) and Troy.

Although they all are from the same geological family, the aspect of the ores are different within the same orebody and from an orebody to an other.

Apparent differences relate to grain size (from non visible to centimetric) to texture (from apparently massive to highly foliated), to mineralogy (carbonates content from 20 to 60%) and to colour (from dark grey to pale green).

The ores are selectively mined into four classes according to the insoluble content (mostly talc and traces of chlorite), Class A is talc > 65%, class B 55-65, class C 45-55, lower than 45% is sterile. The three classes from the three Ludlow mines are mixed. The shovel operator does the sorting according to his foreman instructions.

A fourth class is "Cosmetic" and may come from Hamm, Argonaut or Rainbow and meets specifications in arsenic, talc content and colour, platineness is not specified.

A more complete system of ore specifications by contract "cahier des charges" between mines and plants in being implemented.

The criteria for ore specifications should be questioned. Carbonate content being a key issue only for autobody applications.

The platineness is more important for at least three major applications : Cosmetics for bulk density and slip, plastics for flexmod, autobody for viscosity. The problem is that we have no better measure of platineness than fill a plastic and assess flexmod. JPG will propose to Bill Sevy to launch a project to assess the texture of the various eastern ores, to find a simple method for ore sorting and decide which grade of ore will be devoted to which market segment.

USING MIKE COALTER

The colour is also an important question for cosmetic and the hue for Congoleum. It should enter the ore definition for the related ores at least.

2.- The problematic of the J&J product.

The Windsor plant had been designed for extreme safety on quality requirements and the settings and product specifications based on the Hammondsburg ore which was more platy than any of the ores available to day.

The bulk density issue.

V The bulk density of the finished powder is important for the filling of the consumer's talc bottle : too light, the bottle cannot hold the normal weight, too heavy the bottle looks unfilled and the consumer feels fooled.

The bulk density depends on two parameters : particle size : the finer the lighter, and aspect ratio : the more platy the lighter. When we closed Hammondsburg and went to Hamm ore, less platy, the bulk density went up, out of specifications and the only solution to come back in spec was to make finer talcs.

Finer pregrind raised difficulties in flotation, so two vertical mills were installed to regrind after flotation. The system is efficient to lower the bulk density back into specifications but reduces the total quality of the body powder by increasing the respirable dust and probably reducing the slip.

The only real solution to the problem would be to find more platy ore in the present orebodies or in other Vermont or Quebec mines. This must be the first target of the proposed study on the ores.

or change Bulk Den. Spec.

The carbonate content.

This has not been a major issue, J&J USA wants < 2% and J&J international accepts < 3%, it has a small influence on recovery, approx 4% of yield for 1% of carbonates.

It is one of the justifications of the shear disc process, the délamination being supposed to liberate micro inclusions of magnesite between the talc sheets. Nobody could confirm this assessment.

The Arsenic.

Arsenic is present in all Vermont ores under different mineral species, arseno-pyrites, sulfides etc. Some are soluble and create problems. The insoluble are not detected by the J&J test.

The soluble arsenic in the ore feed varies from 1 to 20 ppm, it is generally around 8% and the flotation takes it down to 1.2 - 1.9 (the limit is 2.5). From time to time, arsenic suddenly goes up and the plant needs a set of tricks to bring it down to specifications. Last time was in December 91. Typical methods are to reduce solid content of the pulp, to eliminate the finest fraction by hydrocyclones, recycle the finished product etc, all have a strong influence on the costs : less recovery, less production. *Also increase water*

(The arsenic control of the ores is being implemented, the contracts between mine and plant will be signed by the end of the year in order to guarantee the plant a supply of ore within an arsenic specification they can manage.

The shear disc.

This equipment was installed with three targets :

- . Delaminate the talc and increase the slip;
- . Liberate microinclusions of magnesite.
- . Give J&J the feeling they are getting a "unique" product.

The two first are strongly questioned, nobody is convinced of the efficiency, but the third keeps a high importance when J&J thinks of different talc sources.

For this reason we should not abandon the shear disc, we could consider transfer it after rougher flotation, the advantages would be maintained at a much lower cost (power and wear).

The ways to a solution.

J&J is under two contradictory trends : the new management, profit oriented and ~~strongly motivated to get the \$ 2 millions savings from a "\$250 talc", on the other hand the 30 years of experience of extreme quality concern with Windsor.~~

We must do our best to flatter the taste of their technicians to play with our plant as if it was their own, frighten them with the risk of non quality with ~~unknown and cheap suppliers~~, and set actual improvements on our production scheme to bring enough price reduction to calm the top management's saving desire. The talc purchase price is only 11% of their turnover.

Bacteriology.

The bacteria control is part of the routine and people do not fully realise the cost involved : purchase of chlorine, heat, time for precautions etc but also the less visible costs like rerun of contaminated lots, corrosion of equipment etc.

The bacteria count is carried out by J&J Royston at no apparent cost.

The technique of sampling has improved and contaminations that were formerly ignored are now visible. J&J has strengthened its standard from 100 germs/gram to 50 germs/gram. Heat alone should be able to control bacteria but J&J imposes to add biocides in the process.

The acid pH needed for the efficiency of chlorine may have a negative effect on the elimination of arsenic and chlorine will be substituted by bromine which is efficient at higher pH.

How to address J&J's request to reduce costs ?

A number of small improvements may bring a moderate reduction in production costs : selection of platy ores, arsenic control of the ores, transfer of shear disc after rougher etc...

They could be completed by developing other markets (mainly plastics) to use the free capacity of the plant and reduce the incidence of fixed costs.

This may be sufficient if it is confirmed that J&J still attach the highest importance to the manufacturing procedures, to the confidence that they developed with the Windsor team during decades of good cooperation.

If it proved to be insufficient then we would have to rebuild a modern and simple flotation plant, making a concentrate comparable to Penhorwood's FDC, at the same low cost and based on Hamm or Ludlow or Broughton ore. The cosmetic part of the process, run under GMP and J&J standards, would take place only after the flash dryer. The cost of this part could be transparent to J&J and openly decided with them.

The flotation plant would be the base to develop markets for platy products into plastic and paint markets at profitable prices and make possible to propose cosmetic talcs to the international market.

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